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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WONG, BLANCHE

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,669

Applicant(s)

LUGIL ET AL.

Examiner

Blanche Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Jul'02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The allowability of claims 1-32,34 has been withdrawn. Examiner apologizes for any inconvenience.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the communication device of cl. 1 that includes a W-CDMA transmitter and a W-CDMA receiver and a processor in data communication with the W-CDMA transmitter and the W-CDMA receiver, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Similarly, the drawing must show an integrated circuit of cl. 30, a method of operating a W-CDMA communication device in cl. 31, and a communication device of cl. 34, and features as follows:

Figures do not disclose a second RAM.

Figures do not disclose how RAM and registers are connected.

Figures do not disclose how processor 10, added to Fig. 1, interact with the other Figures, including the receiver, first and second RAMs and registers.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "9" has been used to designate signal acquisition component in cl. 1, acquisition hardware in Specification, p. 7, ln. 26-p.8, ln. 3, and acquisition unit in both Specification, p. 7, ln. 26-p.8, ln. 3 and Fig. 15.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-32,34** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to cl. 1,30,31,34, what are the first and second parameters.

With regard to cl. 1,30,31,34, how the first and second RAMs operate together.

With regard to cl. 8 and 34, it is unclear what is QPN. Examiner suggests spelling out abbreviation when it is used for the first time.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1,30,31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. Pat No. 5,511,067) in view of Johnson (U.S. Pat No. 5,675,609).

With regard to cl. 1,30,31, Miller discloses a communication device, an integrated circuit, and a method for W-CDMA, comprising: (CDMA, col. 3, ln. 57)

a W-CDMA transmitter (transmit modulator of a CDMA modem, col. 3, ln. 61) (a forward CDMA channel is a channel from a base station to mobile units) wherein the transmitter is configured to operate in accordance with first parameters (a forward CDMA channel code) (the forward and reverse CDMA channels are designated by

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predetermined orthogonal code sequences generated by using Walsh functions, col. 6, ln. 53-55);

a W-CDMA receiver (data receiver of a CDMA modem, col. 3, ln. 62) (a reverse CDMA channel is a channel from a mobile unit to a base station) wherein the receiver is configured to operate in accordance with second parameters (a reverse CDMA channel code) (the forward and reverse CDMA channels are designated by predetermined orthogonal code sequences generated by using Walsh functions, col. 6, ln. 53-55);

a signal acquisition component (the antennas at base station 12 and 14 in Fig. 1; see also arrows 20a and 20b, col. 5, ln. 27-37) and

a processor (CDMA modem processor and system controller) (system controller that includes interface and processing circuitry, col. 5, ln. 13-14; see also Fig. 1) (“... Each CDMA modem processor 60 is coupled to the CDMA base station’s system controller 44.”, col. 7, ln. 1-7) in data communication with the W-CDMA transmitter, the W-CDMA receiver and the signal acquisition component, wherein the processor (CDMA modem processor) is configured to provide for software configuration (software element, col. 7, ln. 2) (see also application layer 204 of a CDMA modem processor in Fig. 5, including forward applications 240 from forward data 213 and reverse applications 242 to reverse data 214) of the first (a forward CDMA channel code) and second parameters (a reverse CDMA channel code).

However, Miller fails to explicitly show transmitter and receiver comprising at least one of a first RAM and first registers and comprising at least one of a second RAM and second registers, respectively.

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Johnson discloses a signaling apparatus with a transmitter 22 and receiver 24 in Fig. 1 and various functional blocks in a digital processing system in Fig. 8. Fig. 8 discloses transmit and receive 82,83 (in and out data buses), RAM 92 (input buffer RAM memory), registers 86,87 (digital registers) and (processor (CPU) (see col. 8, ln. 54-col. 9, ln. 22).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include RAMs and registers in transmitters and receivers. The suggestion/motivation for doing so would have been to provide for a method and apparatus for generating a propagable signal on a piece-wise or segmental basis. Johnson, col. 1, ln. 61-67. Therefore, it would have been obvious to combine Johnson with Miller for the benefit of enabling each signal piece or segment to integrate into a continuous signal and thus to maximize transmission efficiency, to obtain the invention as specified in cl. 1,30,31.

With regard to cl. 30, Miller further discloses integrated circuit (ASIC, col. 7, ln. 3).

With regard to cl. 2, the combination of Miller and Johnson discloses the communication device of cl. 1.

Johnson further discloses the processor (CPU) controls at least one of the first RAM and the first registers, and the second RAM and the second register (CPU reads into from signal synthesis program ROM into the program RAM according to the type of output signal desired and then executes the instructions causing the input data RAM to

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generate a pulse train of which the pulse polarity to load into digital registers 86 and the pulse width information to load into digital registers 87, col. 8, ln. 54-col. 9, ln. 22).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a processor that controls at least one of the first RAM and the first registers, and the second RAM and the second register. The suggestion/motivation for doing so would have been to provide for a method and apparatus for generating a propagable signal on a piece-wise or segmental basis. Johnson, col. 1, ln. 61-67. Therefore, it would have been obvious to combine Johnson with Miller for the benefit of enabling each signal piece or segment to integrate into a continuous signal and thus to maximize transmission efficiency, to obtain the invention as specified in cl. 3.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW
February 17, 2006



CHI PHAM
PERMISSORY PATENT EXAMINER
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2/21/06